

## Appendix F: Explanation of Endangered Species Rating System

Series II Gap data utilizes a table of Wildlife Habitat Relationships (WHR) to linking vegetation type to species habitats. Species habitats are graded from 1 (lowest quality) to 5 (highest quality).

For each one-hectare site, we developed an index of threatened and endangered species habitat quality by, first, identifying which threatened or endangered species were most likely to be present (based on vegetation type and the WHR correspondence table); second, by multiplying each threatened and endangered species by its 1-to-5 habitat quality rating; and third, by summing the resulting species-habitat quality product over all present threatened and endangered species. Algebraically, this index takes the following form:

$$\text{Index}_i = \sum_j (\text{TES}_{ij} * \text{HQ}_{ij})$$

The resulting index values range from 0 to more than 100. We identified sites with index values exceeding 40.0 as including high concentrations of threatened and endangered (vertebrate) species.